AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application.

LISTING OF CLAIMS:

1. (Original) In a spread spectrum communications integrated circuit receiver supplying combiner channel assignments for a plurality of demodulated information channels in a sample stream, a system comprising:

a plurality of demodulating fingers; and

wherein each demodulating finger has a sample stream input to accept a sample stream, a soft symbol output to supply soft symbols associated with demodulated information channels, and a combiner channel assignment output to supply combiner channel assignments for associated soft symbols.

2. (Currently amended) In a spread spectrum communications integrated circuit receiver supplying combiner channel assignments for a plurality of demodulated information channels in a sample stream, a system comprising:

The system of claim 1 wherein each demodulating finger further includes:

a combiner channel assignment input to accept combiner channel assignments; and

a plurality of demodulating fingers, wherein each demodulating finger has a sample stream input to accept a sample stream, a soft symbol output to supply soft symbols associated with demodulated information channels, and a combiner channel assignment output to supply combiner channel assignments for associated soft symbols. The system of claim 1 wherein each demodulating finger further includes: wherein the

demodulating finger combiner channel assignment output assigns combiner channels to associated soft symbols in response to the accepted combiner channel assignments.

3. (Original) The system of claim 2 wherein each demodulating finger further includes:

at least one channel register having an input connected to the demodulating finger combiner channel assignment input to accept combiner channel assignments and an output connected to the demodulating finger combiner channel assignment output to supply stored combiner channel assignments.

4. (Original) The system of claim 3 wherein each demodulating finger demodulates a plurality of information channels; and

wherein each demodulating finger supplies combiner channel assignments for the soft symbols from the plurality of demodulated information channels.

5. (Original) The system of claim 4 wherein each demodulating finger further includes:

a plurality of finger channels;

wherein each finger channel includes a sample stream input coupled to the demodulating finger sample stream input to accept the sample stream and a soft symbol output connected to the demodulating finger soft symbols output to supply soft symbols from a demodulated information channel.

6. (Original) The system of claim 5 wherein each finger channel further includes a channel register, each finger channel having a combiner channel assignment input connected to the channel register input to accept and store a combiner channel assignment.

7. (Original) The system of claim 6 wherein each demodulating finger combiner channel assignment output is coupled to the channel register output of each finger channel to supply the combiner channel assignment corresponding to the demodulated information channel soft symbols.

8. (Original) The system of claim 7 wherein each finger channel further includes a code input to accept an uncovering code, each finger channel demodulating an information channel in response to the receipt of a corresponding uncovering code.

9. (Original) The system of claim 2 further comprising:

a controller having an output connected to the combiner channel assignment input of each demodulating finger to supply combiner channel assignments.

10. (Original) The system of claim 2 in which the receiver accepts a carrier signal, with a plurality of multipath delays, that is converted into a sample stream with a corresponding plurality of sample stream delays,

wherein selected sample stream delays are assigned to corresponding demodulating fingers; and

wherein common information channels from each sample stream delay are demodulated by the corresponding demodulating fingers into soft symbols which are assigned to common combiner channels.

11. (Original) The system of claim 10 in which the sample stream includes a first and a second delay, and also includes a first information channel;

wherein a first demodulating finger receives the assignment of a first combiner channel to the first information channel, the first demodulating finger demodulating the first information channel in the sample stream with the first delay and assigning soft symbols from the demodulated first information channel to the first combiner channel; and

wherein a second demodulating finger receives the assignment of a first combiner channel to the first information channel, the second demodulating finger demodulating the first information channel in the sample stream with the second delay and assigning soft symbols from the demodulated first information channel to the first combiner channel.

12. (Original) The system of claim 2 in which the receiver accepts a plurality of independent sample streams including common information channels;

wherein each sample stream from the plurality of independent sample streams is assigned to a corresponding demodulating finger from the plurality of demodulating fingers; and

wherein common information channels from each independent sample stream are demodulated by the corresponding demodulating fingers into soft symbols which are assigned to common combiner channels.

13. (Original) The system of claim 12 in which a first sample stream, independent of a second sample stream, is included, with a common first information channel;

wherein a first demodulating finger receives the assignment of a first combiner channel to the first information channel, the first demodulating finger demodulating the first information channel in the first sample stream and assigning soft symbols from the demodulated first information channel to the first combiner channel; and

wherein a second demodulating finger receives the assignment of a first combiner channel to the first information channel, the second demodulating finger demodulating the first information channel in the second sample stream and assigning soft symbols from the demodulated first information channel to the first combiner channel.

14. (Original) In a spread spectrum communications demodulating finger integrated circuit to supply combiner channel assignments for a plurality of demodulated information channels in a sample stream, the demodulating finger comprising:

a sample stream input to accept a sample stream;

a soft symbol output to supply soft symbols from demodulated information channels; and

a combiner channel assignment output to supply combiner channel assignments for the soft symbols.

15. (Currently amended) In a spread spectrum communications demodulating finger integrated circuit to supply combiner channel assignments for a plurality of demodulated information channels in a sample stream, the demodulating finger comprising:

The demodulating finger system of claim 14 further comprising:

a combiner channel assignment input to accept combiner channel assignments;

a sample stream input to accept a sample stream;

a soft symbol output to supply soft symbols from demodulated information channels; and

a combiner channel assignment output to supply combiner channel assignments for the soft symbols wherein the combiner channel assignment output assigns combiner channels for soft symbols in response to accepting combiner channel assignments.

16. (Original) The demodulating finger of claim 15 further comprising:

at least one channel register having an input connected to the demodulating finger combiner channel assignment input to accept combiner channel assignments and an output connected to the demodulating finger combiner channel assignment output to supply stored combiner channel assignments.

17. (Original) The demodulating finger of claim 16 wherein the demodulating finger supplies a plurality of combiner channel assignments, with each combiner channel assignment corresponding to information channels from the plurality of information channels.

18. (Original) The demodulating finger of claim 17 further comprising:

a plurality of finger channels;

wherein each finger channel includes a sample stream input coupled to the demodulating finger sample stream input to accept the sample stream and a soft symbol output connected to the demodulating finger soft symbol output to supply soft symbols from a demodulated information channel.

19. (Original) The demodulating finger of claim 18 wherein each finger channel further includes a channel register, each finger channel having a combiner channel assignment input connected to the channel register input to accept and store a combiner channel assignment corresponding to the information channel being demodulated by that finger channel.

20. (Original) The demodulating finger of claim 19 wherein each demodulating finger further includes an output connected to the channel register output to supply the combiner channel assignment corresponding to the demodulated information channel soft symbols.

21. (Original) The demodulating finger of claim 20 wherein each finger channel further includes a code input to accept an uncovering code corresponding to an information channel, each finger channel demodulating an information channel from the plurality of information channels in response to the received uncovering code.

22. (Original) In a spread spectrum communications integrated circuit receiver, a method for supplying combiner channel assignments for a plurality of demodulated information channels in a sample stream, the method comprising:

accepting a sample stream;

demodulating information channels in the sample stream; and

supplying combiner channel assignments with the soft symbols of the demodulated information channels.

23. (Currently amended) In a spread spectrum communications integrated circuit receiver, a method for supplying combiner channel assignments for a plurality of demodulated information channels in a sample stream, the method comprising:

accepting a sample stream;

demodulating information channels in the sample stream; and

supplying combiner channel assignments with the soft symbols of the demodulated information channels, including ~~The method of claim 22 further comprising:~~

~~accepting combiner channel assignments; and~~

~~wherein supplying combiner channel assignments with soft symbols includes~~ supplying combiner channel assignments corresponding to demodulated information channels; and

accepting combiner channel assignments.

24. (Original) The method of claim 23 further comprising:

storing combiner channel assignments in a register; and

wherein supplying combiner channel assignments includes supplying the combiner channel assignments from the register.

25. (Original) The method of claim 23 further comprising:

accepting an uncovering code; and

wherein demodulating information channels includes demodulating an information channel in response to accepting an uncovering code.

26. (Original) The method of claim 25 in which the sample stream includes each information channel being covered with a Walsh code from a plurality of Walsh codes; and

wherein accepting an uncovering code includes accepting an uncovering code corresponding to the information channel to be demodulated.

27. (Original) The method of claim 23 further comprising:

accepting a carrier signal with a plurality of multipath delays;

converting the carrier signal into a sample stream with a plurality of corresponding delays; and

wherein accepting the sample stream includes accepting a sample stream with a plurality of sample stream delays; and

the method further comprising:

assigning selected sample stream delays to parallel demodulation paths;

wherein demodulating information channels includes demodulating a common information channel in each parallel demodulation path; and

wherein supplying combiner channel assignments with the soft symbols includes supplying combiner channel assignments from each parallel demodulation path to the same combiner channel.

28. (Original) The method of claim 23 further comprising:

accepting a plurality of independent carrier signals including a common information channel;

converting the plurality of independent carrier signals into a corresponding plurality of independent sample streams including a common information channel; and

wherein accepting a sample stream includes accepting a plurality of independent sample streams with a common information channel; and

the method further comprising:

assigning each independent sample stream to a parallel demodulation path;

wherein demodulating information channels includes demodulating a common information channel in each parallel demodulation path; and

wherein supplying combiner channel assignments with the soft symbols includes supplying combiner channel assignments from each parallel demodulation to the same combiner channel.

29. (Original) The method of claim 23 in which the integrated circuit receiver includes a plurality of demodulating fingers; and

wherein accepting the sample stream includes each demodulating finger accepting the sample stream;

wherein demodulating information channels includes each demodulating finger demodulating information channels in the sample stream; and

supplying combiner channel assignments with the soft symbols includes each demodulating finger supplying the combiner channel assignments with the soft symbols.

30. (Original) The method of claim 29 in which each demodulating finger includes a plurality of finger channels; and

wherein supplying combiner channel assignments with the soft symbols includes each finger channel supplying a combiner channel assignment corresponding to the information channel being demodulated.

31. (Original) The method of claim 30 in which the integrated circuit receiver includes a controller; and

wherein accepting combiner channel assignments includes each demodulating finger accepting combiner channel assignments from the controller.